

# Work Order ID 60228

Tuesday, June 29, 2010 11:39:49 AM



Page 1

Item ID: D3908-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Stud Receiver, Lower

Start Date: 6/29/2010 Start Qty: 10.00



Cust Item ID:

Required Date: 7/6/2010 Req'd Qty: 10.00



Customer:

Reference:

Approvals:

Process Plan:

*R*

Date:

*10-6-29*

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr								
D3908	C								

100	Cut blanks as per folio	0.00							
Bandsaw	Memo	0.00							
Jeaspa Bandsaw	CUT BLANK 4.00" LONG								

*ml 10/07/03*

*10 0*

110		0.00							
HAAS I	Memo	0.00							
HAAS CNC vertical machine #1	MACHINE AS PER FOLIO FA866 AND DWG								
	FOLIO REV: <i>AA</i>								
	DWG REV: <i>C</i>								
	DEBURR								

*ml 10/07/08*

*10 0*

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 60228

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Page 2

Item ID: D3908-3

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Setup Start



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Stop



Item Name: Stud Receiver, Lower

Start Date: 6/29/2010 Start Qty: 10.00



Cust Item ID:

Required Date: 7/6/2010 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

120

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

*and 10/07/08*

*10* *8*

130

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

*8/10/07/09*

*(XO)*

160

Identify as per dwg & Stock Location: *93*

0.00



Packaging

Memo

0.00

Packaging

*10.7.95* *(XO)*

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

**Work Order ID 60228**

Tuesday, June 29, 2010 11:39:49 AM



Page 3

Item ID: D3908-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Stud Receiver, Lower

Start Date: 6/29/2010 Start Qty: 10.00



Cust Item ID:

Required Date: 7/6/2010 Req'd Qty: 10.00



Customer:

Reference:


Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	QC21- Final Inspection - Work Order Release	0.00							
 QC	Memo	0.00							
Quality Control									

*10-7-9*  
*ME*  
*10-7-9*

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Tuesday, June 29, 2010 11:39:53 AM

Page 1

Work Order ID: 60228

Parent Item: D3908-3

Parent Item Name: Stud Receiver, Lower

Start Date: 6/29/2010

Required Date: 7/6/2010

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP REV:A NEW ISSUE 09-11-24 JLM VERIFIED BY:DD IPP Rev:B  
as per dwg revB DD 10.04.20 verified by:EC IPP Rev:C per ECN10-  
581 10.05.28 DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303B1.000X2.000		Purchased	No			100	f	21.1930	0.333333	3.508768			

303 BAR 1" X 2"

Location

Loc Qty

Loc Code

MAT

114899

21.19298

21.19298

3.508768 on 10/07/03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 40228
<b>Description:</b> Stud Receiver Lower		<b>Part Number:</b> D3908-3
<b>Inspection Dwg:</b> D3908	<b>Rev:</b> B/C	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.25	+0.005/-0.001	Ø.252	✓			
0.625	+/-0.010	.630	✓			
0.368	+/-0.010	.362	✓			
Ø0.453	+0.010/-0.000	Ø.456	✓			
1.95	+/-0.030	1.941	✓			
Ø0.38	<del>±0.006/-0.001</del>	Ø.378	✓			
0.63	+/-0.030	.624	✓			
2.43	+/-0.030	2.424	✓			
0.63	+/-0.030	.624	✓			
0.75	+/-0.030	.752	✓			
0.38	+/-0.030	.374	✓			
R0.06	+/-0.030	R.060	✓			
R0.25	+/-0.030	R.250	✓			
3.80	+/-0.030	3.802	✓			
0.735	+0.000/-0.010	.730	✓			
Ø0.129	+0.005/-0.001	Ø.129	✓			
1.25	+/-0.030	1.250	✓			
15°	+/-0.5°	15°	✓			
1.587	+/-0.010	1.587	✓			
1.588	+/-0.010	1.587	✓			
0.31	+/-0.030	.314	✓			
0.750	+/-0.010	.757	✓			
0.95	+/-0.030	.950	✓			
0.99	+/-0.030	.990	✓			
90°	+/-0.5°	90°	✓			
0.06 x 45°	+/-0.030 x 0.5°	.075 x 45°	✓			
0.80	+/-0.030	.803	✓			

<b>Measured by:</b> [Signature]	<b>Audited by:</b> S	<b>Preliminary Approval:</b>
<b>Date:</b> 10/07/08	<b>Date:</b> 10/07/09	<b>Date:</b>

Rev	Date	Change	Revised by	Approved
A	10.04.01	New Issue	KJ	
B	10.04.20	Dwg Rev updated	KJ	

W/O:			WORK ORDER CHANGES					
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

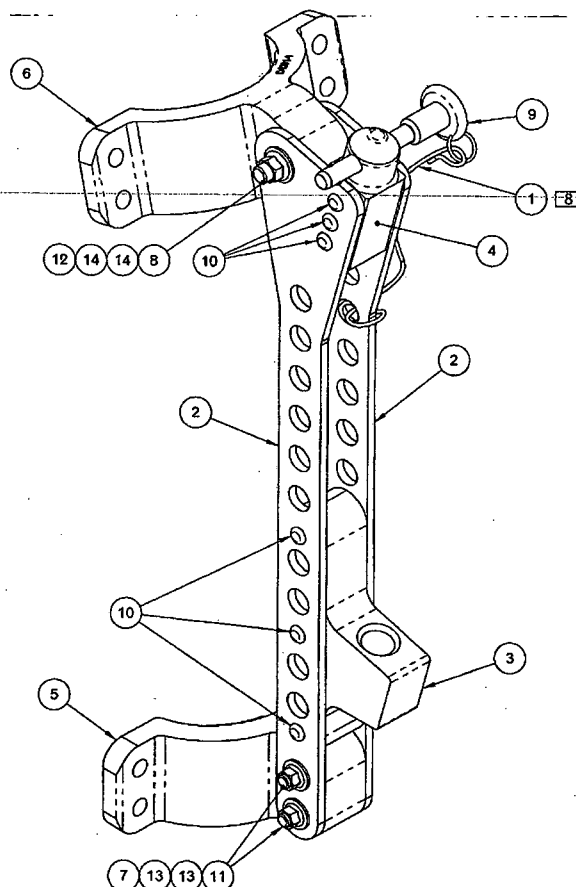
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP		Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

ITEM	QTY.	P/N	DESCRIPTION
	X	D3908-041	X-TUBE LUG ASSY (AFT)
1	1	D2690-6	LANYARD
2	2	D3908-1	AFT X-TUBE LUG PLATE
3	1	D3908-3	STUD RECEIVER LOWER
4	1	D3908-5	EYEBOLT STUD
5	1	D3910-1	X-TUBE LUG
6	1	D4091-1	MOUNTING LUG
7	2	AN3C12A	BOLT
8	1	AN4C13A	BOLT
9	1	MS17984-C413	PIP PIN
10	6	MS20815-4M20	RIVET
11	2	MS21043-3	NUT
12	1	MS21043-4	NUT
13	4	NAS1149C0332R	WASHER
14	2	NAS1149C0432R	WASHER



**D3908-041 X-TUBE LUG ASSY (AFT)**

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3908-041" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 2.34 lbs
- 8) ATTACH TO D3908-1 BY LOOPING AROUND LIGHTENING HOLE FIRST AND THEN SECURE TO MS17984-C413 PIP PIN'S RING.

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. *60225*  
*BS10-620*

**RELEASED**  
2010-05-28  
*W*

C	REDESIGNED ITEM #2; ITEM#6 REPLACES QTY 1 ITEM#5; QTY 2 FOR ITEMS #7 & 11 WAS QTY 4, QTY 8 FOR ITEM #13 WAS 4, ADDED ITEMS #8, 12 & 14	MB	10.05.27
B	BOM: D3908-5 REPLACED WITH D3908-5, QTY 1 ADDED: D2690-6 & MS17984-C413. SHEET 5: ADDED D3908-5	JPH	10.04.06
A	NEW ISSUE	JPH	10.03.04
REV.	DESCRIPTION	BY	DATE
DESIGN	JPH		
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.05.27		

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D3908** REV. C  
SHEET 1 OF 5  
TITLE **X-TUBE LUG ASSY (AFT)** SCALE NTS

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

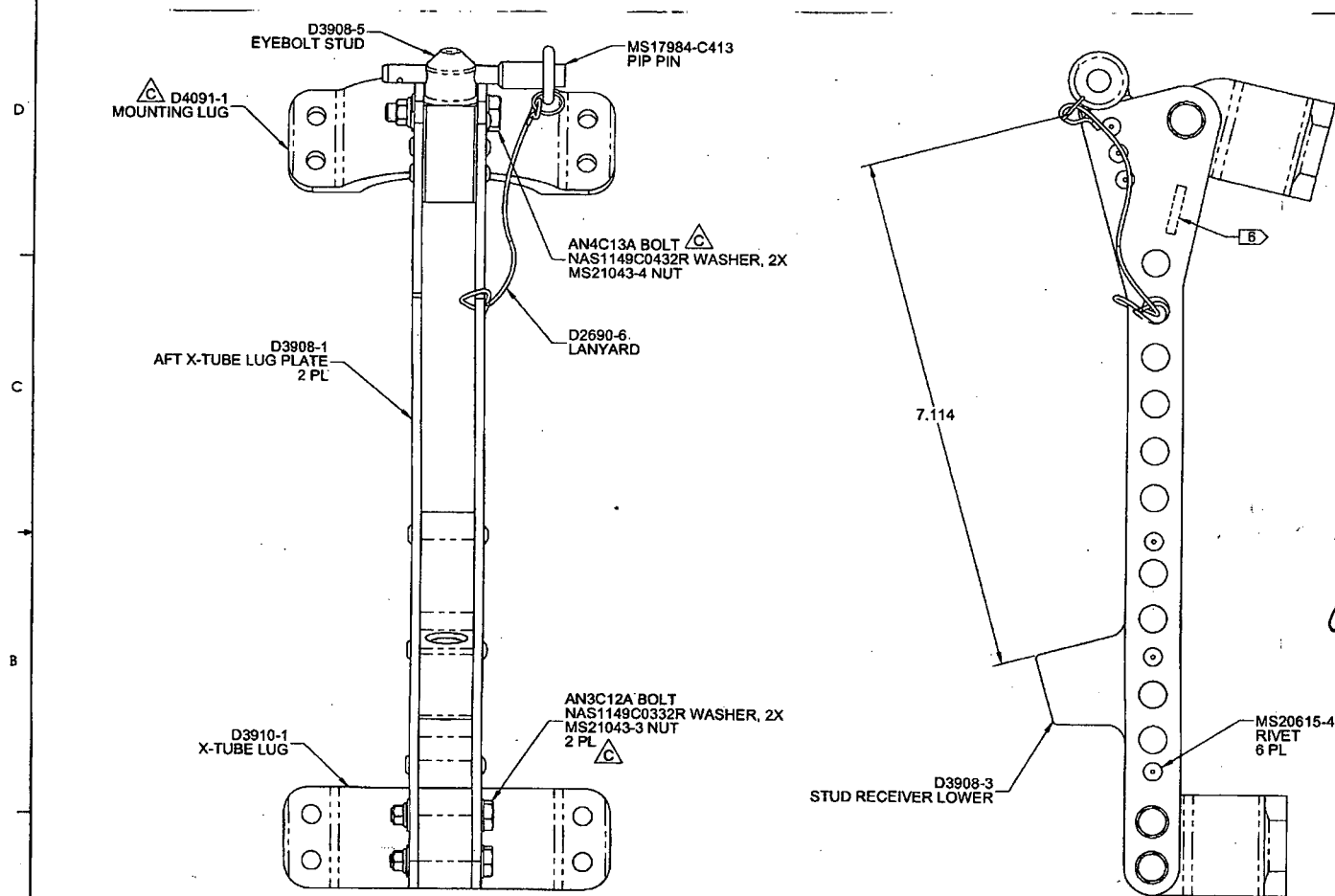
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

8 7 6 5 4 3 2 1



41060228

**RELEASED**  
2010-05-28  
JNP

**D3908-041 X-TUBE LUG ASSY (AFT)**

DESIGN	JFH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN		DRAWING NO.	REV. C
CHECKED		D3908	SHEET 2 OF 5
MFG. APPR.		TITLE	SCALE
APPROVED		X-TUBE LUG ASSY (AFT)	NTS
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DATE	10.05.27		

8 7 6 5 4 3 2 1

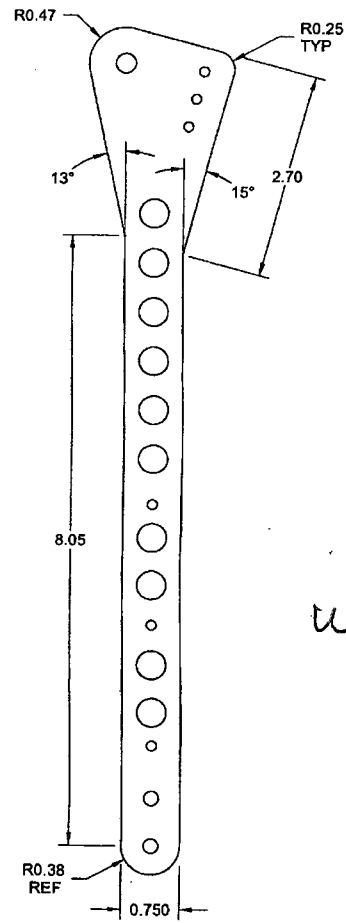
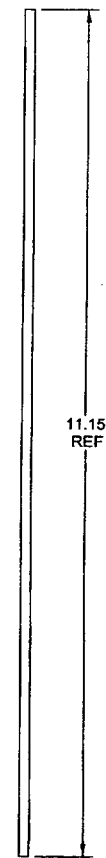
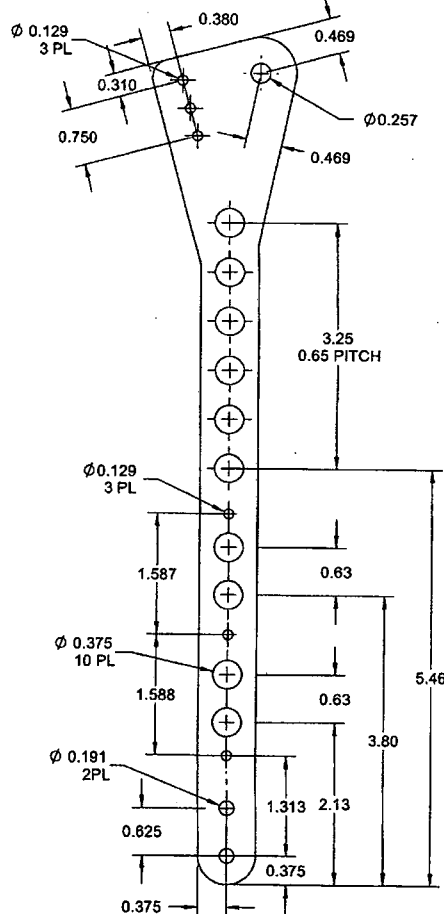
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries








W/O 60225

RELEASED  
2010-05-28  
MP

- NOTES:
- 1) MATERIAL: 303/304/316 STAINLESS STEEL 0.125" SHEET ANNEALED 2B FINISH, PER MIL-S-6059 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240 PER DART SPEC M304S11GA OR M303S11GA
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: 0.31 lbs

D3908-1 AFT X-TUBE LUG PLATE

DESIGN	JFH	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3908	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR.		X-TUBE LUG ASSY (AFT)	NTS
DATE	10.05.27	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

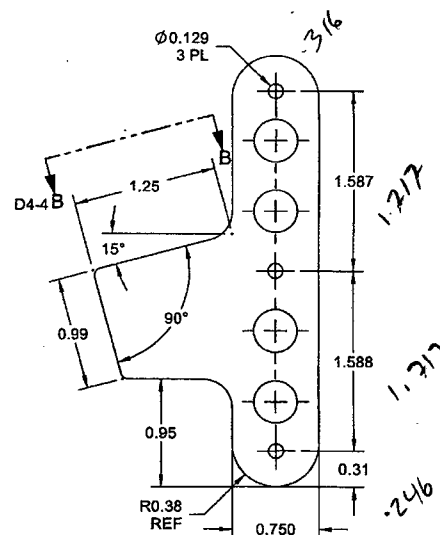
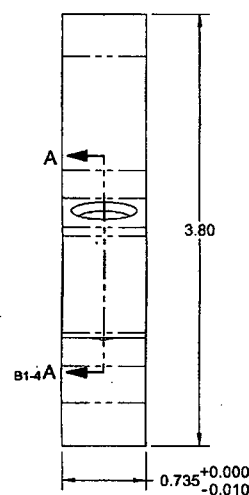
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





1) MATERIAL: 303/304/316 STAINLESS STEEL BAR, PER ASTM A276  
PER DART SPEC M303B OR M304B

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

7) WEIGHT: 0.69 lbs

7) WEIGHT: 0.00 lbs

RELEASE  
2010-05-28

DESIGN	JFH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA  DRAWING NO. <b>D3908</b>  TITLE <b>X-TUBE LUG ASSY (AFT)</b>  COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PROVIDED AS IS WITHOUT WARRANTY. THE USER AGREES THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR ON BEHALF TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	REV. 1
DRAWN			SHEET 4 OF 4
CHECKED			SCALE
MFG. APPR.			NTS
APPROVED			
DE APPR.			
DATE 10.05.27			

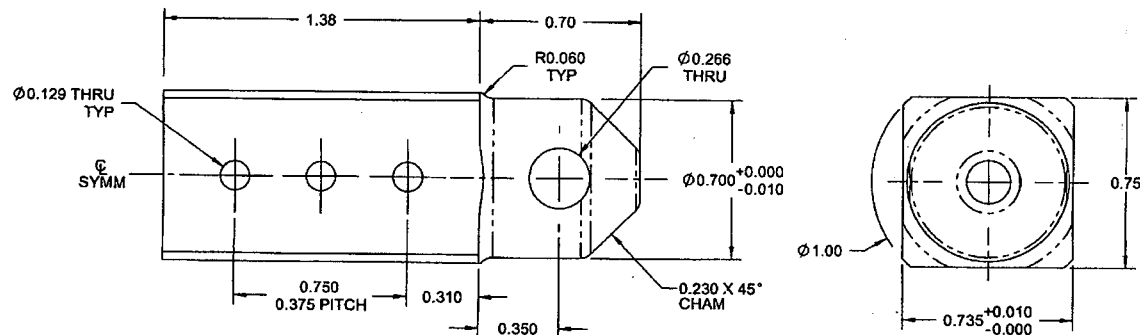
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**D3908-5 EYEBOLT STUD**

**NOTES:**

- 1) MATERIAL: 303/304/316 STAINLESS STEEL ROUND BAR, PER ASTM A276 OR ASTM A582  
PER DART SPEC M303R OR M304R
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.26 lbs

DESIGN	JFH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN		DRAWING NO. <b>D3908</b>	REV. C
CHECKED			SHEET 5 OF 5
MFG. APPR.		TITLE <b>X-TUBE LUG ASSY (AFT)</b>	SCALE NTS
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DATE	10.05.27		

**RELEASED**  
2010-05-28  
MP

*wlo 60225*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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